

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Alexander Alexandrovich Maltsev et al.	Examiner:	Emmanuel Bayard
Serial No.:	10/815,035	Group Art Unit:	2611
Filed:	March 30, 2004	Docket:	884.B55US1
Title:	SYSTEM AND METHOD FOR SELECTING DATA RATES TO PROVIDE UNIFORM BIT LOADING OF SUBCARRIERS OF A MULTICARRIER COMMUNICATION CHANNEL		

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(e)(2), Applicants hereby authorize the Commissioner to charge the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p), to Deposit Account No. 19-0743. Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

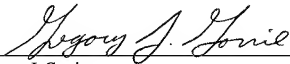
Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications, and Non-Published Applications identifiable by USPTO Serial Number, are no longer required to be provided to the Office. Notification of this change to this effect was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004 and October 19, 2004. Thus, Applicant has not included copies of any US Patents or US Patent Applications identifiable by serial number that may be cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Respectfully submitted,

ALEXANDER ALEXANDROVICH MALTSEV ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402  
(480) 659-3314

By /  /  
Gregory J. Gorrie  
Reg. No. 36,530

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Substitute for form 1445A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)

Complete if Known

<b>Application Number</b>	10/815,035
<b>Filing Date</b>	March 30, 2004
<b>First Named Inventor</b>	Maltsev, Alexander
<b>Group Art Unit</b>	2611
<b>Examiner Name</b>	Bayard, Emmanuel

Sheet 1 of 2

Attorney Docket No: 884.B55US1

**US PATENT DOCUMENTS**

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-2001/0055952A1	12/27/2001	Ficarra, L. J.	08/10/2001
	US-2002/0122383A1	09/05/2002	Wu, S., et al.	12/29/2000
	US-2002/0126694A1	09/12/2002	Kahola, M.	12/27/2001
	US-2002/0163495A1	11/07/2002	Doynov, P.	05/02/2001
	US-2003/0119534A1	06/26/2003	Kostic, Z., et al.	02/14/2003
	US-2003/0139196A1	07/24/2003	Medvedev, I., et al.	01/23/2002
	US-2004/0018843A1	01/29/2004	Cerwall, P., et al.	07/02/2003
	US-2005/0068916A1	03/31/2005	Jacobsen, E. A., et al.	09/29/2003
	US-2005/0265281A1	12/01/2005	Ketchum, J. W.	08/03/2005
	US-2005/0276344A1	12/15/2005	Ling, F., et al.	08/18/2005
	US-2006/0039312A1	02/23/2006	Walton, J. R., et al.	10/11/2005
	US-2006/0050623A1	03/09/2006	Hartman, Jr., D. L.	10/27/2005
	US-2006/0067278A1	03/30/2006	Li, X., et al.	08/09/2005
	US-5,479,447	12/26/1995	Chow, P. S., et al.	05/03/1993
	US-5,668,810	09/16/1997	Cannella, Jr, J. E.	04/26/1995
	US-6,061,405	05/09/2000	Emami, S.	12/15/1997
	US-6,178,158	01/23/2001	Suzuki, Yasunori, et al.	10/09/1997
	US-6,192,026	02/20/2001	Pollack, Michael A., et al.	02/06/1998
	US-6,249,543	06/19/2001	Chow, Jacky S.	11/23/1999
	US-6,748,212	06/08/2004	Schmutz, T. R., et al.	12/13/2004
	US-6,795,424	09/21/2004	Kapoor, S., et al.	06/30/1998
	US-6,891,858	05/10/2005	Mahesh, H., et al.	06/30/2000
	US-7,020,212	03/28/2006	Strait, J. C.	01/16/2001
	US-7,120,198	10/10/2006	Dafesh, P. A., et al.	05/26/1999
	US-7,124,193	10/17/2006	Leung, K. K., et al.	08/23/2001

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T <sup>2</sup>
	WO-05015769A2	02/17/2005	Stephens, A., et al.	
	WO-9741675A1	11/06/1997	Johnson, T., et al.	

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BANGERTE, BOYD, et al., "High-Throughput Wireless LAN Air Interface", Intel Technology Journal: Wireless Technologies, 7(3), <a href="http://developer.intel.com/technology/itj/index.htm">http://developer.intel.com/technology/itj/index.htm</a> , (Aug. 19, 2003), 47-57	

**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-5449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP-609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1445A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(Use as many sheets as necessary)**Complete if Known**

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<b>Filing Date</b>	March 30, 2004
<b>First Named Inventor</b>	Maltsev, Alexander
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<b>Examiner Name</b>	Bayard, Emmanuel

Sheet 2 of 2

Attorney Docket No: 884.B55US1

**OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BANSAL, PRATEEK, et al., "Adaptive Loading in MIMO/OFDM Systems", (December 13, 2001) <a href="http://web.mit.edu/brzezina/www/359/359.pdf">http://web.mit.edu/brzezina/www/359/359.pdf</a> , (Observed September, 2003), 12 pgs.	
		ERGEN, M., et al., "QoS Aware Adaptive Subcarrier Allocation in OFDMA Systems", ((Observed September, 2003)), 26 pgs.	
		FISCHER, R. F., et al., "A New Loading Algorithm for Discrete Multitone Transmission", <u>Global Telecommunications Conference, 1996. Globecom '96. 'Communications: The Key to Global Prosperity</u> London, UK 18-22, Vol 1, (Nov 18, 1996), 724-728	
		JAROT, S. P., et al., "Each Carrier Transmission Power Control with Antenna Carrier Diversity for OFDM/DS-CDMA System", <u>Telecommunications, Euro Publication</u> , 11(6), (Nov 1, 2000), 539-546	

**EXAMINER****DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-5446)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP-609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.